

REMARKS

In the Office Action mailed November 17, 2005, the Examiner noted that claims 1-26 were pending, and rejected claims 1-26. Claims 1, 13-15 and 19-24 have been amended, claim 25 has been canceled, and, thus, in view of the forgoing claims 1-24 and 26 remain pending for reconsideration which is requested. No new matter has been added. The Examiner's rejections are traversed below.

Request For Withdrawal of Finality of Action

On January 12, 2006, over two months ago, a Petition To Director Requesting Withdrawal of Finality of Action was filed. That petition is renewed and incorporated by reference herein.

Art Rejection

On page 2 of the Office Action, the Examiner rejected all claims under 35 U.S.C. § 102 as anticipated by Kodialam.

Kodialam is directed to a multicasting system that routes using a minimum cost tree where cost is determined relative to a service level of the routing request and based on residual link capacity and bandwidth such that a low capacity link has a higher cost because the probability of a delay in communication may result in the service level of the request not being satisfied. As stated by Kodialam:

In accordance with an exemplary embodiment, data is routed from a source node to a plurality of receiver nodes, the source node and each receiver node included in a network of nodes interconnected by links. The routing is accomplished by (a) forming from the network of nodes and interconnected links, in response to a multiicast routing request, a subnetwork having paths along which the data may be routed between the source node and the plurality of receiver nodes based on a service level of the routing request; (b) generating at least one tree, each tree comprising a set of nodes and links from the source node and the plurality of receiver nodes, wherein each tree is generated with link weights based on residual capacity of the links in the tree after the data is routed through the tree; (c) selecting a tree as the multicast routing tree, wherein the tree is selected based on a predetermined criteria; and (d) routing the data along the multicast routing tree.

(See Kodialam, col. 4, lines 5-21)

In contrast, the cost based routing of claims 1, 13-15 and 19-24 includes "delay and number of hops" (see application pages 7 and 13-14). Multicasting of streaming information is time sensitive. The number of hops is very important to the time it takes for a packet to be received, and, thus, a routing that considers and minimizes a number of hops will produce improved routing, particularly for streaming multicasting.

It is submitted that the present claimed invention patentably distinguishes over Kodialam and withdrawal of the rejection is requested.

The dependent claims depend from the above-discussed independent claims and are patentable over the prior art for the reasons discussed above. The dependent claims also recite additional features not taught or suggested by the prior art. For example, the prior art does not teach or suggest:

- a. minimizing cost to a particular receiver node (see claim 2);
- b. costs between all nodes and a particular receiver node are minimized (see claim 3);
- c. dividing the nodes into groups and determining the costs between groups (see claim 4);
- d. restricting the cost calculation based on a range (see claim 6);
- e. recalculating the network tree when the network changes as indicated by certain packets (see claim 9); and
- f. a substitute routing is determined based on an anticipated failure (see claim 11).

It is submitted that the dependent claims are independently patentable over the prior art.

It is submitted that the claims are not taught, disclosed or suggested by the prior art. The claims are therefore in a condition suitable for allowance. An early Notice of Allowance is requested.

If any further fees, other than and except for the issue fee, are necessary with respect to this paper, the U.S.P.T.O. is requested to obtain the same from deposit account number 19-3935.

Respectfully submitted,

STAAS & HALSEY LLP

Date: March 16, 2006

By: 
J. Randall Beckers
Registration No. 30,358

1201 New York Ave, N.W., 7th Floor
Washington, D.C. 20005
Telephone: (202) 434-1500
Facsimile: (202) 434-1501